



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification<sup>5</sup> :</b>  <b>C12N 15/10, C12Q 1/68</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 91/09944</b>  <b>(43) International Publication Date:</b> 11 July 1991 (11.07.91)
<b>(21) International Application Number:</b> PCT/US90/07641  <b>(22) International Filing Date:</b> 21 December 1990 (21.12.90)  <b>(30) Priority data:</b> 455,611                      22 December 1989 (22.12.89) US 455,967                      22 December 1989 (22.12.89) US 585,471                      20 September 1990 (20.09.90) US  <b>(60) Parent Application or Grant</b> <b>(63) Related by Continuation</b> US                                      585,471 (CIP) Filed on                              20 September 1990 (20.09.90)  <b>(71) Applicant (for all designated States except US):</b> CETUS CORPORATION [US/US]; 1400 Fifty-Third Street, Emeryville, CA 94608 (US).		<b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> GELFAND, David, H. [US/US]; 6208 Chelton Drive, Oakland, CA 94611 (US). MYERS, Thomas, W. [US/US]; 6400 Christie Avenue, #5420, Emeryville, CA 94608 (US).  <b>(74) Agent:</b> SIAS, Stacy, R.; Cetus Corporation, 1400 Fifty-Third Street, Emeryville, CA 94608 (US).  <b>(81) Designated States:</b> AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), NL (European patent), SE (European patent), US.  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
<b>(54) Title:</b> HIGH TEMPERATURE REVERSE TRANSCRIPTASES  <b>(57) Abstract</b>  Methods are provided for the replication and amplification of RNA sequences by thermoactive DNA polymerases. Reverse transcription of RNA is catalyzed by, for example, 94 kDa <i>Tag</i> , 62 kDa <i>Tag</i> , <i>nTth</i> and recombinant <i>Tth</i> DNA polymerase. Reverse transcription is coupled to PCR amplification in a one enzyme procedure using a thermostable polymerase.		